Welcome back to the arboretum newsletter! A lot has happened since the spring semester ended. The Horticulture Garden has survived the summer with very few losses. East Texas weather certainly played havoc on the plants and our disposition. Torrential rains in May and June wiped out many of the annuals and the drought that followed was also hard to deal with. We did lose a Mexican Redbud in the Phase 2 area (wet feet?) but that will soon be replaced with a containerized specimen we have in the shade house. We also lost a Flatwood plum but that will be easy to replace. We are looking forward to the fall semester and plan to continue our expansion eastward. Our fall goals are to set a good number of plants in the Ag facility grounds, wipe out the weeds that have encroached, and install an irrigation system.

The best news is that an SFA arboretum fund is in place at the university. Everyone is aware of the budget crunch across the state and I have assured the administration that no state monies will be channeled into the project. The growth of the arboretum is going to depend on several recently-funded proposals: a Houston Livestock Show and Rodeo grant, a small Hudy Wilson supplement, a Nacogdoches Clearing house grant and, of course, the members of this newsletter group. Thanks for the support. Any new members you can attract would speed up our progress! I have attached a subscription form to the end of this newsletter. Pass it on to a friend.

Garden trivia. The following are just a few of the observations I made this summer while watching the planting endure its first summer.

I like the Mexican marigold, Tagetes lemonii. It makes a tight, round 2' tall plant and is very aromatic when the
leaves are pinched.

The 20" tall Yaupon, Ilex vomitoria, that was balled and burlapped off my farm by a former student and set in place by students into Bed A - the entrance bed - shuddered, grew very little, but did survive! It's a beautiful multistem specimen. The Texas sages that surround it will add a nice touch when they gain in size and scale.

Irrigation pays. Whether we like it or not, we are going to have to irrigate much of the garden. The backfill subsoil is tight and droughty. One of my class efforts this fall is to install an impulse sprinkler system. While a pop up system would be less conspicuous and, thus, more aesthetic - my visits to other arboreteums this summer suggests that we go with scattered sprinklers on risers connected by buried mainlines. This system would be inexpensive and would require very little maintenance. There are numerous ways to screen the risers and sprinkler heads from view.

We need more shade on the site. Many of the species have suffered a little from the intense summer sun. As the oaks, maples, and pines gain stature, some of the shade loving species will find their home a little more hospitable. The Dawn Redwood burned a little of its terminal foliage during the July heat (typical) but has recovered nicely. I like that tree.

We will need to concentrate on labelling. Good arboreteum quality labels cost approximately two dollars each! This fall's class will hang wire embossed labels to the specimens so that visitors wanting a closeup look will be able to identify a plant in question. We can obtain good labels later.

The concept of using annuals as "filler" between the trees and shrubs as a method of weed control and creating garden interest seems to work. Our budget demands that trees and shrubs be acquired in small containers and grown out. The space between the growing trees and shrubs will be planted to annuals until the planting fills out.

Look for an article about the garden in an upcoming issue of the Texas Gardener. I visited briefly with Julie Ryan in early August. Ms. Ryan is a freelance writer who deals with articles about the environment and native plant gardening. Many of her articles have appeared in Texas Gardener and Dallas/Fort Worth Home and Garden. We enjoyed a quick walk through the garden heat and discussed her latest effort. She is putting together a book about gardens of Texas. She visited several of the better home landscapes in Nacogdoches.

The wood chip mulch generously donated by the Exposition Center (Thank you, Tony Weir!) gave us some problems with nitrogen deficiency. Instead of tilling it into the soil, we should have used it solely as a surface mulch. In spite of additional N applications, many of our plants demonstrated deficiency. We have secured 70 cubic yards of pine bark for the arboreteum and that should go a long way in helping our plants grow.

The May 9th garden field day came off without a hitch. I was a little disappointed in the turnout that day but the
following week saw a steady stream of plant lovers meandering through the garden. I was, of course, pleased with the media attention we received about our effort. It takes a lot of work to get an arboreteum off the ground but as the garden grows so should our supporters.

One of the efforts that the arboreteum class is going to make this fall will be in the seeding of a wide range of herbaceous perennials. I am putting an order together and look forward to expanding this avenue of landscaping. Herbaceous perennials are often neglected by Texas gardeners and they can provide wonderful variety to any landscape.

California Trip I had the good fortune of attending the annual meeting of the American Society for Horticultural Science held this year at Davis, California. Fourteen SFA Hort majors attended the meetings and I can assure you that riding herd on Texas college kids in California is interesting! While in the Bay area I visited a number of horticultural spots, and have listed below a few of the most interesting.

1. Strybing Arboretum - located in Golden Gate Park, San Francisco. Absolutely a must stop. Excellent collection of many mature specimens. This arboretum was initiated in the late 19th century and contains more than 5000 species. There are numerous special gardens - fragrance, Biblical, blind, Shakespeare, opera, etc. - and one should allocate an entire day to take in the entire 70 acres. No admission charge. 8-4:30 Mon - Fri, 10 - 5 Sat, Sun. 415-661-1316.

2. Japanese Tea Garden - located between the above arboretum and the Young museum this is one of the best I have ever had the privilege to visit. Constructed in 1893. Beautiful Japanese maples, cherries, peaches, plums, and azaleas. Tremendous landscaping - a large Buddha statue, a tea house, walks, bridges, waterfalls, and numerous nooks and crannies - loved the Juniper topiary specimens. Nominal admission charge. 415-661-1316.


4. C.M. Goethe arboretum, California State University at Sacramento, 6000 J Street. 916-454-6494. This small 3 acre arboretum specializes in plants of central California. Excellent labels and plant maintenance. Founded in 1959.

5. State Capitol Gardens at Sacramento, 10th-12th Sts., L and N Sts., 916-324-0333. Another example of how Californians love plants. 33 acres of landscaped park with emphasis on camellias plus 5000 other plants, many labelled. Fine displays of bulbs and annuals in season. Daily.

6. University of California Arboretum at Davis, 916-752-2498. Warren Roberts in charge of this 100 acre arboretum that winds its way along both sides of Putah Creek. Special collections of Californian, Australian and Mediterranean native plants. Fine groves of eucalyptus, acacia, pine, and cypress. The Shields Oak Grove, the Weier Redwood Grove, the Storer Perennial Garden and the Shields
White Flower Garden are memorable. Emphasis is on drought tolerant plants. Research station and library.

7. Berkeley Botanical Garden, University of California at Berkeley on Centennial Drive, 415-642-3343. No admission charge. Phenomenal 32 acres organized by regions of origin. Plants of Asia, New Zealand, Africa, etc. One of the best in the country with 12,000 species. I spent a most enjoyable early Sunday morning wandering almost alone through the hills and valleys of this meandering garden.

8. Regional Parks Botanical Garden, Tilden Regional Park, Berkeley, 415-841-8732, no charge. Seven acres with 1500 species. Special sections include dune, sea bluff, mountain meadow, and alpine gardens. Arranged by regions so that one actually walks the plants from Oregon to Mexico! Channel islands included.

9. Kaiser Center, Lakeside Drive, Oakland, 415-271-3300, 9-9 Mon-Sat. The Kaiser Center is a 28 story building, the parking building next to it is about 4 stories and on top of it is an amazing 3.5 acre garden. When the elevator doors open to the vast expanse of trees, lawn, and annual flowering displays, one forgets immediately where the park is located! Pool and fountains and garden are a serene stop in the middle of the Oakland hustle and bustle. Nice restaurant.

10. Lakeside Park, Park View Terrace, Oakland. 122 acre park contains a sizeable palm planting with 67 species dedicated in the summer of 1964. Daily, dawn to dusk.


12. There are numerous other horticultural delights in the Bay area that I did not get to. Any members planning a trip to the San Fran bay area can contact me for a list of stops. Thanks to J.C. Raulston of North Carolina State University for his help in setting my packed itinerary. Too much to see, too little time!

Plant Acquisitions May, 1986 - Sept, 1986. The following plants have been added to the University collection and are listed by source.

1. From the nursery of Lynn Lowery, Kirbyville, Texas. Ecotones Nursery. This exciting new nursery specializes in uncommon and native plants; delightful people to work with.

   Pinus taeda - a rare genetic dwarf Loblolly that reaches a mature height of 8'(?); very slow growing

   Styx grandiflora - Bigleaf Snowbell - cousin to the Styx americana; already set in the Phase 1 garden, this larger leaved specimen is often shrub-like and reaches an ultimate height of 20'; Needs to be planted more.

   Koelreuteria drummondii - western soapberry native to SW
U.S. is trouble free, reaches 50', and is rarely available.

*Cornus mexicana* a Mexican dogwood with typical dogwood foliage but the blooms are tulip-like and somewhat less conspicuous than our natives.

*Asimina triloba* – Paw Paw, to 25', edible fruit, suckers badly, pest free. Some people show skin sensitivity to this plant.

*Liriodendron tulipifera* – tulip tree or yellow poplar, can reach 100', needs plenty of space to support the rambling root system. Some problems with limb breakage, aphids on new growth and a leaf spot disease are sometimes a problem.

*Nyssa aquatica* water tupelo. Wet soil sites, to 70', trouble free.

*Sophora japonica* – our specimen is still fighting a scale problem. Japanese Pagoda tree or Chinese Scholar tree is the common name, considered a trouble free specimen tree.

*Melanthium virginicum* this bunchflower was collected originally from Bleakwood, Texas and sends up a 3' flower spike. Texas native.

*Rosa carolina* Carolina rose that forms thickets, potential ground cover, needs containment in small gardens.

*Acer leucoderme* Chalk maple, we have set this maple in the Phase 2 garden area, known for excellent fall coloring.

*Ugniadia speciosa* This small tree is a Texas native with larger leaves than the Mexican version.

*Physostegia pulchella* Lionheart, this strain collected by Lowrey is reported to send up a 5' spike (normally 2'). Also known as "obedient" plant – move the flowers and they stay in place, excellent for floral arranging. Likes wet spots but will tolerate dry areas. Sun to dappled shade.

*Malus ioensis* creniserrata a native Texas crab that may be marginal here because of cedar apple rust and other problems.

*Viburnum nitidum* Shiny viburnum, shrub to about 12' tall and one that loves wet areas.

*Cyrilla racemiflora* – American Cyrilla, already have one in place in the phase 2 garden, loves wet swampy ground.

*Crataegus brachyacantha* Blueberry hawthorn, shrub to about 30', mesic to wet areas.

*Prunus gracilis* can't locate any information on this one.

*Magnolia quinquemeta* X *Magnolia stellata* "Jane" – shrubby with flowers that are red-purple on the outside and white inside.

*Magnolia pyramidata* Pyramid magnolia, to 30', mesic uplands. Originally out of Jasper county, the western most region of this native.

*Spigellia marilandica* Indian pipe, herbaceous perennial.

*Leucothoe racemosa* Sweetbells leucothoe, shrub to about 12', mesic to wet woodlands, should be planted more.

*Ilex verticillata* winterberry holly, to 12', bogs and seepy areas.

*Magnolia macrophylla* Bigleaf magnolia, to 40', leaves are 12 to 32 inches long, native from Kentucky to Florida, then west into Louisiana. Lots of litter!
Rhododendron oblongifolium Early azalea, shrub to about 9', creek bottoms and seepy areas.

Viburnum luzonicum Luzon's viburnum
Viburnum acerifolium Mapleleaf viburnum, to 6' tall with a suckering habit. Ours is in the phase 2 area and suffered considerable sunburn but has forced new growth.

Pieris japonica Japanese Pieris, sometimes mistakenly called Andromeda. To 8', slow growth, lovely bronze growth on new foliage. Protect from wind, can handle full sun if well watered, organic soil.

Hibiscus militaris Scarlet rose mallow, shrubby herbaceous plant to 6' tall, wet open areas, dies back to ground.

Leucothoe populifolia Florida leucothoe, seldom seen in cultivation but is probably superior to other Leucothoes for southern gardens. The habit is lax, arching, and multistemmed. The plant tends to sucker, looks good along stream banks, to 12', best in shade and moist areas.

Collected while in California at various nurseries. Thanks to Jean Lehman at Berkeley Hort Nursery for her understanding and acceptance of the paperwork associated with an SFA purchase order! Thanks to David Powell and Joni at Hines Nursery, Vacaville for dealing with this small order (this nursery is used to dealing with semi truck loads - not little Dodge trucks with a camper).

Stranvaesia davidiana - Chinese stranvaesia, large shrub or small tree to 30', bright red fruits persist for a long period, prefers a moist, acid, organic, well drained soil. Uncommon in our area. May be susceptible to fireblight.

Pieris japonica "Flamingo", "Mt. Fire", "Valley rose", and variegata. OK, I went a little overboard on Pieris. I like the plant - don't see it enough in our area.

Juniperus squamata "Meyeri" - Meyer or Fishback juniper, to 8', upright, oddly angled stiff branches, blend of green, gray, reddish foliage.

Osmanthus heterophyllus 'Ilicifolius' - Holly leaf osmanthus, dense, symmetrical to 8' - eventually to 20'. Evergreen, good screen.

Osmanthus heterophyllus 'Rotundifolius' - to 5' with roundish small leaves and few spines.

Osmanthus fortunei 'San Jose' - slow growth to 20', usually seen at 6', freeze problem (?), leaves oval and holly like.

Osmanthus heterophyllus 'Variegatus' - to 5', with densely set leaves edged creamy white, useful to light up shady areas.

Pyracantha coccinea 'Wyatti' - orange red berries that color early, 8 to 10', good for espalier.

Pyracantha fortuneeana 'Graberi' - huge clusters of dark red fruit that color in midfall and last through winter, upright growth.

Cotoneaster divaricatus - Spreading cotoneaster, to 6' with many stiff branches spreading outward, red berried,
disease problems in our area (?)..

**Chaenomeles speciosa** 'Toyo-Nishiki' and 'Mouli' - the flowering quince. I was amazed at the number of varieties of this commonly planted east Texas shrub. The first red blooming shrub in the early spring. 'Toyo-Nishiki' has pink, white, red and combination colored flowers on the same branch! Not to be confused with **Chaenomeles japonica** which is a somewhat ratty shrub planted in our area.

**Viburnum propinquum** this Viburnum only reaches 4', may have freeze problems in our area.

**Abelia X grandiflora** 'prostrata' - low growing compact form of this common east Texas landscape plant.

**Viburnum tinus** 'Spring Bouquet' - Laurustinus is a fine upright rounded evergreen species that reaches 12' in height. Not that common here but has good potential.

**Stachyurus chinensis** - spiketail, not sure how closely related this is to **Stachyurus praecox** or if the name is wrong, little known in North America, pale yellow early pendulous flowers.

**Spiraea bumalda** 'Goldflame' - rosey red flowers, to 4', new leaves an interesting bronze, turning yellow as they expand. We need to grow more Spiraeas in our east Texas gardens. Some sources list this spiraea as **Spiraea X bumalda** (cross between S. albiflora X S. japonica).

**Arbutus unedo** - Strawberry tree, may be damaged in severe winters but is worth the risk. To 35', attractive tree.

**Ligustrum ovalifolium** - California privet, to 15', evergreen only in mildest winters, heat tolerant, responds to pruning.

**Ternstroemia gymnanthera** - Evergreen shrub, very slow growing, grows well with camellia, azaleas in dappled shade. Similar to Cleyera.

**Acer japonicum** 'Green Cascade' - Fullmoon maple, couldn't stop myself from tackling the maples. Small delicate tree with cut leaves, slow growing, best placed as shrubs, keep out of wind, appreciates dappled shade.

**Acer palmatum** 'Oshio Beni' - this variety of Japanese maple is like 'Atropurpureum' but more vigorous, long arching branches.

**Acer palmatum** - Dwarf japanese maple sold by Hines Nursery.

**Acer palmatum** 'Dissectum atropurpureum' - I think this is also known as 'Ever Red', small mounding shrub with weeping branches. Finely dissected leaves, purple tinged, lacy foliage turns crimson in fall.

**Acer palmatum** 'Dissectum Viridis' - Laceleaf Japanese maple, small shrub with drooping branches, green bark, pale green leaves turn gold in autumn.

**Acer platanoides** 'Crimson King' - to 50', slower growing Norway maple, aphids may be a problem, questionable in our area.

**Berberis gladwynensis** 'William Penn' - Evergreen patented variety, should be OK in our area, yellow flowers.

**Cotoneaster apiculatus** - Cranberry cotoneaster, to 4',
hedge or screen, potential disease and insect problems in our area.

**Euonymus fortunei** - 'Emerald-N-Gold' and 'Emerald Gaiety'. Two Euonymus varieties I have not seen in our area. Very bright looking plants.

**Euonymus japonica pulchella variegata** - very small leaves and one that I could have secured through Texas nurseries.

**Ligustrum X vicaryi 'Dwarf Golde'** - Vicary or golden Vicary privet. This hybrid is slower growing than both of its parents (L. ovalifolium 'Aureomarginata' X L. vulgare). Rarely seen in our area and often overused in the west, this shrub retains a bright yellow foliage through the summer, good accent plant.

**Mahonia aquifolium** - Oregon holly-grape, light shade, don't know why we don't see more of this attractive evergreen shrub in east Texas.

**Pyracantha angustifolia** 'Gnome' - a dwarf narrow leaved firethorn, to 6' ultimately.

**Pyracantha coccinea** 'Fiery Cascade', 'Wyattii', and 'Pauciflora' - three varieties of firethorn that are not available from Texas nurseries.

**Viburnum tinus** 'Robustrum' - new Hines Nursery variety of Laurestinus.

The following *Ilex* cultivars were collected from Strybing arboretum. Thanks to Walden Valen, the director, for permission and his assistance in this effort. About 5 cuttings of each holly variety were collected, kept in a cooler, and stuck in our prop beds on returning to Nacogdoches.

*Ilex aquifolium* varieties: Green Maid, Princess Pat, Golden Milkmaid, Ferox, Green Knight, Argentea Mediopicta, Varigold, angustifolia, Firecracker, Ferox aurea, Golden Gate, Sunnybrook, Echo, N.F. Barnes, Camelliafolia, Golden Queen, Fructo letea, Silvary, Royal Red, Special, *Ilex cornuta* 'Dazzler', *Ilex crenata* 'Buxifolia', *Ilex altaclarensis* 'Wilsonii', *Ilex X Koehneana* 'Wirt L. Winn', *Ilex X* 'Malcolm S. Whipple'.

Also, from the Strybing arboretum I purchased two container plants from their nursery manager: an *Acer caprinifolium* (Hornbeam maple) and an *Acer rufinerve* (Redvein maple). Keep in mind that plants purchased in California cannot be returned to Texas through Arizona!

**FALL HAPPENINGS**

Feel free to drop by the arboretum and enjoy the students' effort as we move into the Phase 3 development plan. Keep in mind that we are growing, that plants are small, and that a gardener's work is never done.

I will get out a brief notice to members on an SFA Horticulture club first annual shrub sale sometime late this fall. The shade house is packed and must be cleaned out. The
Horticulture club has grown out a wide variety of plants. We have about 30 varieties of crepe myrtles to move out, plenty of Fatsia japonicas, and a wide assortment of other plants. You will not want to miss this sale.

**BOOK REVIEW**


Geyata Ajilvsgi. 1979. Wildflowers of the Big Thicket, East Texas, and Western Louisiana. Texas A & M University Press. 361 pp. I believe a softbound version of this handy reference book is available. Excellent color plates, groupings according to plant associations and then detail listings by family. A must for the wildflower lover.

**Japanese Maple Guidelines:** Many plant lovers in our area ask about the potential for Japanese maples in our area. Acer palmatum varieties are numerous but poorly available in east Texas. Here are a few care/culture facts for those willing to try this beautiful small tree. The tree reaches 15 to 25' in height; many of the dissectum types reach only 8' and become quite mound-like in shape. We should have no problems with hardiness. The tree can reach 10' in ten years. The Japanese maple is a quality landscape plant; magnificent accent plant, specimen, shrub border, groupings, bonsai; definitely adds class to any landscape. Crafted varieties are more beautiful and not as tough as seedlings; even the seedlings have uncommon grace and usefulness. Those varieties with finely cut leaves have greater leaf burn problems. Wind is the culprit. Dappled shade is best and if you can place the plant in a protected nook or cranny of your yard, the higher your chances of success. The species appreciates a well drained, slightly acidic, organic soil. Some of the better varieties include: Atrorpurpureum, Bloodgood (Deep red spring and summer foliage - available in Texas), Bonfire, Burgundy Lace, Butterfly, Crimson Queen, Dissectum, Ever Red, Garnet, Heptalobum Osakazuki, Koshimino, Linearilobum, Ornatum, Oshio Beni, Roseo-marginatum, Sango Kaku. I saw magnificent 5 and 10 gallon specimens in California that had price tags over $200 each. Ouch! Bonsai and tub specimens were higher. For those looking for their first Japanese maple, start with Bloodgood. That variety appears to do well here (note the specimen at the Student Center at SFA, Northeast corner). The Japanese maple is definitely an aristocrat of small trees!
Here are a few thoughts jotted down just prior to this newsletter's mailout.

1. The Fall project is underway in the garden and I am blessed with eighteen enthusiastic students. The summer weeds are only a bad memory now and the wheelbarrel loads of pine bark mulch adds a nice touch to the landscape. A few hours with the weedeater dressed up bed borders and a general cleanup has brightened my spirits. I am still working on a way to handle summer maintenance chores; fewer students on campus and our terrific summer heat makes it difficult to keep up with weeds and watering.

Come by and enjoy our Chrysanthemum variety display. We will have 18 varieties on display by October 1st and intend to leave them in place and test their perennial vigor qualities. Garden mums are always appreciated for their fall and spring color display, but they have excellent ground cover characteristics if they are pruned on a timely basis. The entrance bed will feature two shades of purple circling a wave of white. In addition to chrysanthemums, we are planting snapdragons, dianthus, and pansies this fall to brighten the garden. It's easy to color the spring with any number of annuals; the fall and early winter east Texas garden is more difficult to brighten. And once again, I plan to plant several beds to flowering cabbage and kale. Most of my students do not seem to like this ornamental; the fact that it is one of the most popular Japanese bedding plants has not moved them!

We have added about 50 new plants to the garden. The Texas native bed by the Wisteria arbor is home to several new Penstemons and Physostegias. Pieris and Osmanthus varieties now grace our south fence row and I'm keeping my fingers crossed that the coming winter will be kind.

Feel free to stroll through the garden anytime. Bring a friend. I will inform members of the upcoming Horticulture club first annual shrub and tree sale. A good time to set container plants is in the late fall. That allows the woody plant to settle into its new home and generate good root development prior to next spring's growth demands. Our sale is being planned for early December and will feature a good diversity of landscape plants in one gallon containers. Help us clean out the shade house!
Yes, I want to be a supporter of the Stephen F. Austin State University Arboretum Association. Members will receive a newsletter every few months that describes arboretum happenings, details new plant acquisitions, and provides landscape plant book reviews. Members will also be informed of "Garden Days", "Plant Exchange Days", and will be notified when Horticulture Club indoor and outdoor plant sales are planned. All of your contribution will be utilized to promote the expansion of the SFA arboretum. Help support this timely effort. An SFA arboretum effort is a project whose time has come.

NAME:

ADDRESS:

Dues are $15 per year: Mail check to SFA Arboretum Fund, Department of Agriculture, PO Box 13000, SFA State University, Nacogdoches, Texas 75962

Yes, I want to be a supporter of the Stephen F. Austin State University Arboretum Association. Members will receive a newsletter every few months that describes arboretum happenings, details new plant acquisitions, and provides landscape plant book reviews. Members will also be informed of "Garden Days", "Plant Exchange Days", and will be notified when SFA Horticulture Club indoor and outdoor plant sales are planned. All of your contribution will be utilized to promote the expansion of the SFA Arboretum. Help support this timely effort. An SFA Arboretum is a project whose time has come.

NAME:

ADDRESS:

Dues are $15 per year: Mail check to SFA Arboretum Fund, Department of Agriculture, PO Box 13000, SFA State University, Nacogdoches, Texas 75962

Yes, I want to be a member of the "Supporters of the SFA State University Arboretum Association".

NAME:

ADDRESS:

Dues are $15 per year: Mail check to SFA Arboretum Fund, Department of Agriculture, PO Box 13000, SFA State University, Nacogdoches, Texas 75962